

Grape Breeding Program Update

Dr. John R. Clark, Professor
Department of Horticulture
University of Arkansas
jrclark@uark.edu

Program Activities

The grape breeding program continues to progress at the University of Arkansas. The major goals of enhanced quality in table grapes with adaptation to the region continue to be pursued. Also, the small effort in wine grapes continues, as the selections from the program got closer look from commercial producers in the state. However, no new crosses for wine grapes are being made.

Major activities in 2003 included:

- 18 crosses made, all for table grapes
- 2,990 seedlings planted in the field from 2002 crosses
- 267 selections evaluated; two advanced trials of promising selections established
- 1,400 seedlings at fruiting resulting in 8 new selections

Challenges

The major challenges in table grape breeding continue to be combining high quality coupled with cracking resistance coupled with large berries with small to no seed traces. The issue of cold hardiness has not been prevalent lately due to the mild winters experienced in recent years. However, that will surely manifest again anytime now. The major emphasis now is on non-slipskin types with a range of flavors and shapes. The goal is to get a grape that has the same mouth “feel” as the *V. vinifera* varieties but with more adaptation, crack resistance, and desired flavors (not bland like *viniferas*). At times, one can be quite frustrated in achieving this unique combination. However, the progress made in the past 10 years is very exciting.

Releases and Propagators

The newest releases from the program, Jupiter and Neptune, are now available commercially since the lag time from release to presence in the marketplace has passed. To access a list of nurseries that propagate these and other Arkansas varieties, take these steps on the internet: Go to www.uaex.edu; choose “Agriculture;” choose “Horticulture;” choose “Fruits & Nuts;” and choose “Grapes;” at which point, one can access descriptions or licensed propagators based on icons used.

Observations on these two releases indicate that they have shown no major cold hardiness limitations. (Winters have not been extremely harsh; but they have done well in the colder location of Fayetteville, with a near 0°F reading last winter with no damage). They both must be sprayed well for downy mildew; do not assume resistance to this disease in these cultivars.

On the Horizon

The program is focusing on one possible release in the next couple of years. The most promising selection is A-2505. It is a white (green) selection, crack resistance, with a thin skin, a mostly neutral flavor, and large clusters. Hardiness has not been tested thoroughly however. Other advanced selections are under test but several years out from any possible

release decision.